



The screenshot shows a Linux desktop with a text editor open. The editor has two tabs: `*exp9.c` and `mergesort.c`. The `mergesort.c` tab is active, displaying the following C code:

```
41     arr[k] = R[j]; |
42     j++;
43     k++;
44 }
45 }
46
47 void mergeSort(int arr[], int l, int r)
48 {
49     if (l < r) {
50         int m = l + (r - l) / 2;
51         mergeSort(arr, l, m);
52         mergeSort(arr, m + 1, r);
53         merge(arr, l, m, r);
54     }
55 }
56
57 void printArray(int A[], int size)
58 {
59     int i;
60     for (i = 0; i < size; i++)
61         printf("%d ", A[i]);
62     printf("\n");
63 }
64
65 int main()
66 {
67     int arr[] = { 12, 11, 13, 5, 6, 7 };
68     int arr_size = sizeof(arr) / sizeof(arr[0]);
69
70     printf("Given array is \n");
71     printArray(arr, arr_size);
72
73     mergeSort(arr, 0, arr_size - 1);
74
75     printf("\nSorted array is \n");
76     printArray(arr, arr_size);
77     return 0;
78 }
79
80
81
82
83
```

The status bar at the bottom indicates "C", "Tab Width: 8", "Ln 41, Col 32", and "INS".

```
adminl4@adminl4-HP-ProDesk-400-G7-Microtower-PC:~$ cd Desktop
adminl4@adminl4-HP-ProDesk-400-G7-Microtower-PC:~/Desktop$ javac MergeSort.java
adminl4@adminl4-HP-ProDesk-400-G7-Microtower-PC:~/Desktop$ java MergeSort
Enter the number of elements:
8
Enter the elements:
5
9
1
10
26
39
67
56
Given Array
5 9 1 10 26 39 67 56

Sorted array
1 5 9 10 26 39 56 67
adminl4@adminl4-HP-ProDesk-400-G7-Microtower-PC:~/Desktop$
```